

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KENNETH J. HARSHBARGER
and AUSTIN K. WICKLINE

Appeal No. 97-2943
Application 08/319,174¹

ON BRIEF

Before KRASS, FLEMING, and DIXON, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of
claims 1 through 8, all of the claims pending in the
application.

¹Application for patent filed October 6, 1994.

Appeal No. 97-2943
Application No. 08/319,174

The invention is directed to a process for priming a multi-chamber ink jet print head the nature of which is apparent from an analysis of representative independent claim 1 reproduced as follows:

1. A process for priming a multi-chamber ink jet print head having an array of nozzles and an ink associated with each chamber in fluid communication with said nozzles, said process comprising the steps of:

positioning a resilient seal around the venting portion of the print head;

positioning the nozzles so that said nozzles are elevated in the vertical position above the ink; and

applying pressure to the vent side of the resilient seal so that each chamber of the print head is pressurized and ink is forced through the nozzles.

The examiner relies on the following references:

Kimura et al. (Kimura)	4,558,326	Dec. 10, 1985
Nozawa et al. (Nozawa)	4,947,191	Aug. 7, 1990
Takahashi	63-094855 ²	Apr. 25, 1988

²Our understanding of the Takahashi reference is based on an English translation thereof prepared by the United States Patent and Trademark Office. A copy of this translation has previously been sent to appellants, as acknowledged by appellants in Paper No. 15.

Appeal No. 97-2943
Application No. 08/319,174

Claims 1 through 8 stand rejected under 35 U.S.C. § 103 as unpatentable over Kimura in view of Nozawa and Takahashi.

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

We affirm.

The examiner contends that, with regard to claims 1 through 3 and 8, Kimura teaches the claimed subject matter but for the nozzles being elevated in the vertical position above the ink. The examiner relies on Nozawa for the teaching of providing a suction tube, as in instant claims 2 and 8, and Takahashi is relied on for the teaching of placing nozzle openings in an upward direction. The examiner reasons that it would have been obvious to combine these teachings so as to rotate the printhead of Kimura to an upright position, as taught by Takahashi, "in order to allow bubbles...[to] have a direct path to exit the nozzles." The examiner further reasons that it would have been obvious to apply suction to an area directly adjacent the nozzles, as taught by Nozawa, "in order to prevent soiling of the interior of the ink jet

Appeal No. 97-2943
Application No. 08/319,174

printer due to ink misting caused by airborne particles discharged from nozzle ports" [final rejection-page 3].

With regard to the specifics of claims 4 through 7 related to gap dimensions or pressure applied to the seal, the examiner contends that these would have been "an obvious matter of design choice..since applicant has not disclosed that this particular gap size solves any stated problem..." [final rejection-page 3].

The examiner's analysis as to the application of the references appears reasonable to us and, when we weigh the examiner's rationale against appellants' arguments, infra, we find the examiner in a better position.

Appellants first argue that "the instant method invention, as claimed, is directed to a manufacturing process whereby the print heads are not 'mounted' in a printer product" whereas Kimura "is directed to a method for purging an already manufactured and deployed ink jet recording apparatus" [principal brief-page 5]. We find this argument to be irrelevant to the instant claimed subject matter because, contrary to appellants' position, there is no instant claim language directed to a "manufacturing process." There is

nothing in the claim language which precludes a method for purging an already manufactured and deployed ink jet recording apparatus.

At page 6 of the principal brief, appellants contend that Kimura does "not...describe a process for priming a multichamber ink jet print head via the steps set out in the claimed invention." However, it would appear that Kimura's air pump for applying pressure would act to prime an ink jet head of the type claimed. As far as not performing the steps set out in the claimed invention, appellants are not specific as to what steps, exactly, are not taught or suggested.

Appellants describe Takahashi as "inadequate" [top of page 7-principal brief] and state that it "does not relate at all to the subject matter as claimed." Again, appellants have failed to point to anything specific about the claims to show that Takahashi "does not relate." Takahashi is clearly directed to subject matter which those skilled in the art would have been familiar with, viz., ink jet printers, and clearly relates to the instant claimed subject matter.

In arguing that the references are not combinable [principal brief-page 7], appellants contend that the

Appeal No. 97-2943
Application No. 08/319,174

resulting combined apparatus would be "inoperable" because the two mechanisms of Nozawa and Kimura "could not fit in one printer." A finding of obviousness under 35 U.S.C. § 103 does not require a bodily incorporation of elements of the combined references, as appellants' argument might suggest, but, rather, only that the references would have suggested to the artisan to do what appellants have done.

Appellants also contend that "important claimed limitations, including nozzle positions and resilient seals, are not, even remotely, suggested" [principal brief-page 7]. However, the examiner has clearly explained how these limitations are, indeed suggested, pointing to the O-ring seal 17 of Kimura as the claimed "resilient seal," and employing Takahashi's teaching of a vertical nozzle position to provide for such an orientation of the nozzle. Thus, the examiner has clearly indicated where, in the references, these limitations are suggested. The burden then shifts to appellants to now come forth with evidence or arguments showing why these features of the references do not satisfy the claimed elements. The burden has not been met by appellants by a bald, unsubstantiated assertion that "important claimed

Appeal No. 97-2943
Application No. 08/319,174

limitations, including nozzle positions and resilient seals, are not, even remotely, suggested" in view of the examiner's reasoning.

With regard to claims 4 through 7, we agree with the examiner that in the absence of any unexpected results, or the solution of a stated problem, the particular dimensions employed by appellants in suction tube distance and the amount of pressure applied to the resilient seal would appear to be nothing more than obvious engineering design choices. Appellants have made no attempt to show otherwise by pointing, for example, to some criticality of these values. The mere contention that the applied references do not teach these values, per se, is not evidence of nonobviousness in view of the examiner's rationale.

In their reply brief, appellants point to various "new points of argument" by the examiner but they offer no substantive counters to the examiner's reasoning, whether new points or not.

We do not contend that there are no arguments appellants could have made to convince us of any error in the examiner's position. We merely contend that appellants did not make

Appeal No. 97-2943
Application No. 08/319,174

them. Thus, on balance, weighing the examiner's rationale against the rather weak arguments, in our view, made by appellants in this case, appellants have not convinced us of any error in the examiner's apparently reasonable rejection of the instant claims.

Accordingly, the examiner's decision rejecting claims 1 through 8 under 35 U.S.C. § 103 is affirmed.

Appeal No. 97-2943
Application No. 08/319,174

No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

AFFIRMED

	Errol A. Krass)	
	Administrative Patent Judge)	
)	
)	
)	
	Michael R. Fleming)	BOARD OF
PATENT	Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
	Joseph L. Dixon)	
	Administrative Patent Judge)	

tdc

Appeal No. 97-2943
Application No. 08/319,174

JOHN J. MCARDLE, JR.
Lexmark International, Inc.
Intellectual Property Law
740 New Circle, NW
Lexington, KY 40511-1876